

[4910-13-P]

# DEPARTMENT OF TRANSPORTATION

**Federal Aviation Administration** 

**14 CFR Part 39** 

[Docket No. FAA-2012-0036; Directorate Identifier 2011-NM-142-AD; Amendment

39-17028; AD 2012-08-11]

RIN 2120-AA64

**Airworthiness Directives;** Bombardier, Inc. Airplanes

**AGENCY:** Federal Aviation Administration (FAA), Department of Transportation

(DOT).

**ACTION:** Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for certain Bombardier, Inc. Model DHC-8-400 series airplanes. This AD was prompted by test reports that showed that failure of a retract port flexible hose of a main landing gear (MLG) retraction actuator could cause excessive hydraulic fluid leakage. This AD requires a detailed inspection for defects and damage of the retract port flexible hose on the left and right MLG retraction actuator and replacement of the flexible hose if needed. We are issuing this AD to detect and correct defects and damage of the retract port flexible hose which could lead to an undamped extension of the MLG and could result in MLG structural failure, leading to an unsafe asymmetric landing configuration.

**DATES:** This AD becomes effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by

reference of a certain publication listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** You may examine the AD docket on the Internet at <a href="http://www.regulations.gov">http://www.regulations.gov</a> or in person at the U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC, 20590.

**FOR FURTHER INFORMATION CONTACT:** Cesar Gomez, Aerospace Engineer, Airframe and Mechanical Systems Branch, ANE-171, FAA, New York Aircraft Certification Office, 1600 Stewart Avenue, Suite 410, Westbury, New York 11590; telephone (516) 228-7318; fax (516) 794-5531.

### **SUPPLEMENTARY INFORMATION:**

#### **Discussion**

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to include an AD that would apply to the specified products. That NPRM was published in the <u>Federal Register</u> on January 23, 2012 (77 FR 3189). That NPRM proposed to correct an unsafe condition for the specified products. The MCAI states:

Testing has shown that in the event of a main landing gear (MLG) retraction actuator retract port flexible hose failure, in-flight vibrations may cause excessive hydraulic fluid leakage. This could potentially lead to an undamped extension of the MLG, which may result in MLG structural failure, leading to an unsafe asymmetric landing configuration.

This [Transport Canada Civil Aviation (TCCA)] directive mandates the [detailed] inspection of the retract port flexible hose [for defects and damage] and its replacement [installing a new retract port flexible hose], when required, to prevent damage to the MLG caused by undamped gear extensions.

You may obtain further information by examining the MCAI in the AD docket.

#### Comments

We gave the public the opportunity to participate in developing this AD. We received no comments on the NPRM (77 FR 3189, January 23, 2012), or on the determination of the cost to the public.

### Conclusion

We reviewed the available data and determined that air safety and the public interest require adopting the AD as proposed.

## **Costs of Compliance**

We estimate that this AD will affect 81 products of U.S. registry. We also estimate that it will take about 1 work-hour per product to comply with the basic requirements of this AD. The average labor rate is \$85 per work-hour. Based on these figures, we estimate the cost of this AD to the U.S. operators to be \$6,885 or \$85 per product.

In addition, we estimate that any necessary follow-on actions would take about 4 work-hours and require parts costing \$0, for a cost of \$340 per product. We have no way of determining the number of products that may need these actions.

# **Authority for This Rulemaking**

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in "Subtitle VII, Part A, Subpart III, Section 44701: General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

### **Regulatory Findings**

We determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- 1. Is not a "significant regulatory action" under Executive Order 12866;
- 2. Is not a "significant rule" under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);
  - 3. Will not affect intrastate aviation in Alaska; and

4. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

We prepared a regulatory evaluation of the estimated costs to comply with this AD and placed it in the AD docket.

### **Examining the AD Docket**

You may examine the AD docket on the Internet at <a href="http://www.regulations.gov">http://www.regulations.gov</a>; or in person at the Docket Operations office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains the NPRM (77 FR 3189, January 23, 2012), the regulatory evaluation, any comments received, and other information. The street address for the Docket Operations office (telephone (800) 647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

### List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

### **Adoption of the Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

## **PART 39 - AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

## § 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new AD:

**2012-08-11 Bombardier, Inc.:** Amendment 39-17028. Docket No. FAA-2012-0036; Directorate Identifier 2011-NM-142-AD.

### (a) Effective Date

This airworthiness directive (AD) becomes effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

### (b) Affected ADs

None.

## (c) Applicability

This AD applies to Bombardier, Inc. Model DHC-8-400, -401, and -402 airplanes; certificated in any category; serial numbers 4001 and subsequent.

## (d) Subject

Air Transport Association (ATA) of America Code 32: Landing Gear.

### (e) Reason

This AD was prompted by test reports that showed that failure of a retract port flexible hose of a main landing gear (MLG) retraction actuator could cause excessive hydraulic fluid leakage. We are issuing this AD to detect and correct defects and damage of the retract port flexible hose which could lead to an undamped extension of the MLG and could result in MLG structural failure, leading to an unsafe asymmetric landing configuration.

# (f) Compliance

You are responsible for having the actions required by this AD performed within the compliance times specified, unless the actions have already been done.

### (g) Actions

Within 600 flight hours after the effective date of this AD, do a detailed inspection for defects and damage of the retract port flexible hose of the left and right MLG retraction actuators, in accordance with the Accomplishment Instructions of Bombardier Service Bulletin 84-32-89, dated March 22, 2011. Repeat the inspection thereafter at intervals not to exceed 600 flight hours. If any defect or damage is found, before further flight, replace the retract port flexible hose with a new or serviceable retract port flexible hose in accordance with the Accomplishment Instructions of Bombardier Service Bulletin 84-32-89, dated March 22, 2011.

## (h) Other FAA AD Provisions

The following provisions also apply to this AD:

(1) Alternative Methods of Compliance (AMOCs): The Manager, New York Aircraft Certification Office (ACO), ANE-170, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the ACO, send it to ATTN: Program Manager, Continuing Operational Safety, FAA, New York ACO, 1600 Stewart Avenue, Suite 410, Westbury, New York 11590; telephone 516-228-7300; fax 516-794-5531. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office. The AMOC approval letter must specifically reference this AD.

(2) Airworthy Product: For any requirement in this AD to obtain corrective actions from a manufacturer or other source, use these actions if they are FAA-approved. Corrective actions are considered FAA-approved if they are approved by the State of Design Authority (or their delegated agent). You are required to assure the product is airworthy before it is returned to service.

### (i) Related Information

Refer to MCAI Canadian Airworthiness Directive CF-2011-14, dated June 17, 2011; and Bombardier Service Bulletin 84-32-89, dated March 22, 2011; for related information.

# (j) Material Incorporated by Reference

- (1) You must use the following service information to do the actions required by this AD, unless the AD specifies otherwise. The Director of the Federal Register approved the incorporation by reference (IBR) of the following service information under 5 U.S.C. 552(a) and 1 CFR part 51:
  - (i) Bombardier Service Bulletin 84-32-89, dated March 22, 2011.
- (2) For service information identified in this AD, contact Bombardier, Inc., Q-Series Technical Help Desk, 123 Garratt Boulevard, Toronto, Ontario M3K 1Y5, Canada; telephone 416-375-4000; fax 416-375-4539; e-mail thd.qseries@aero.bombardier.com; Internet http://www.bombardier.com.
- (3) You may review copies of the service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, Washington. For information on the availability of this material at the FAA, call 425-227-1221.

(4) You may also review copies of the service information that is incorporated by

reference at the National Archives and Records Administration (NARA). For information

on the availability of this material at an NARA facility, call 202-741-6030, or go to

http://www.archives.gov/federal\_register/code\_of\_federal\_regulations/ibr\_locations.html.

Issued in Renton, Washington, on April 11, 2012.

John P. Piccola,

Acting Manager,

Transport Airplane Directorate,

Aircraft Certification Service.

[FR Doc. 2012-9472 Filed 04/23/2012 at 8:45 am; Publication Date: 04/24/2012]

9